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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Naohiko Otake

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22850

7590

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EXAMINER

AMADIZ, RODNEY

ART UNIT

PAPER NUMBER

2629

NOTIFICATION DATE

DELIVERY MODE

05/26/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/762,480	<b>Applicant(s)</b> OTAKE ET AL.	
	<b>Examiner</b> RODNEY AMADIZ	<b>Art Unit</b> 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,4,5 and 7-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4,5 and 7-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 21, 2009 has been entered.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 5, 7, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Unruh (USPGPUB 2005/0162395—hereinafter Unruh) in view of Dow et al. (US. Patent 7,038,717--hereinafter "Dow"), Nakae et al. (USPGPUB 2004/0166829—hereinafter "Nakae"), Mak (USPGPUB 2004/0085289—hereinafter "Mak"), Fleck et al. (U.S. Patent 6,977,811—hereinafter "Fleck") and Suzuki et al. (USPGPUB 2002/0075281—hereinafter "Suzuki").

As to **Claim 1**, Unruh teaches an information processing apparatus (***Fig. 1, 1***), comprising: a display (***2***); a keyboard including alphanumeric keys (***3***) each allocated to one character in a first input mode (***the Examiner interprets the first input mode to***

**be the telephone mode where number characters are used**), wherein at least one of the alphanumeric keys of the keyboard is allocated to more than one character in the second input mode (**Fig. 1, reference number 3 and Pg. 4, ¶' 60 and 61; the Examiner interprets the second input mode as the text mode**) and is provided on a second side of the apparatus (**Fig. 1, note that the alphanumeric keys are on the second side (lower half) of the apparatus**); at least one cursor key (**Fig. 1, note up arrow and down arrow**) configured to select a word generated by a predetermined program (**See Figs. 10-13 and Pg. 6, ¶'s 74-75**), wherein the at least one cursor key is provided on a first side of the apparatus, opposite to the second side, between the display and the keyboard (**Fig. 1, note that the cursor keys are on the top side of the apparatus and note the position of arrow keys in relation to the display and keyboard**); a common button (**space character**) configured to be a determination button to determine the word selected from candidates appearing on the display according to a number of times a selected alphanumeric key is pressed in a second input mode while the predetermined program is activated (**Figs. 7-13 and Pg. 5, ¶ 63 and Pgs. 5-6, ¶'s 71-75—note that the space character is used as the determination button. Also note that Unruh is silent as to the location of the space character**).

Unruh fails to teach the common button configured to be an activation button to activate a predetermined program. Examiner cites Dow et al. to teach a common button configured to be both an activation button to activate a predetermined program and a determination button (**Fig. 1A, Reference Numbers 26, 34, 36 or 38 and Col.3, lines**

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**37-45 and Col. 9, lines 27-40).** At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to incorporate button reuse as taught by Dow in the information processing apparatus taught by Unruh so that the apparatus may be faster and more convenient to use due to the lack of an enter button (**Dow et al.—Col. 9, lines 35-37**).

Unruh, as modified by Dow, fails to teach that the common button is provided on a first side of the apparatus between the display and the keyboard. Examiner cites Nakae to teach a program activation button (**Fig. 1A, 14c and 14g**) and determination keys (**14d**) located on a first side of the apparatus between the display (**13**) and the keyboard (**14f—See Fig. 1—note that both the activation keys 14c, 14g and determination keys 14d constitute a common key as described in the claim limitation**). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to place the common button between the display and the keyboard as taught by Nakae in the information processing apparatus taught by Unruh and Dow, so as to make it convenient for the user to find and comfortable for the thumb to access.

Unruh, as modified by Dow and Nakae, fails to teach a pointing device configured to move a pointer appearing on the display in a desired direction, wherein the pointing device is adjacent to the common button. Examiner cites Mak to teach a pointing device (**Fig. 3, joystick 310**) configured to move a pointer (**110**) appearing on the display in a desired direction (**Pg. 3, ¶'s 37-38**). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to include a

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pointing device as taught by Mak in the information processing apparatus taught by Unruh, Dow and Nakae, in order to add functionality to the device as well as to obtain greater control of the pointer.

The combination of Unruh, Dow and Nakae teaches that the common button is between the display and the keyboard and thus teaches that the common button is arranged outside of the perimeter of the plurality of cursor keys (**Unruh—Fig. 1, note “up” and “down” arrows**). Unruh, as modified by Dow and Nakae; however, fails to teach that the cursor keys are arranged around a perimeter of the pointing device and the common button is arranged outside a perimeter of the plurality of cursor keys. Examiner cites Mak to teach a plurality of cursor keys (**Mak—Fig. 3, 306a, 306b, 308a and 308b**) arranged around a pointing device (**Fig. 3, 310**). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to replace the cursor keys taught by Unruh, as modified by Dow and Nakae with the cursor keys taught by Mak in the arrangement shown by Mak (i.e. at the perimeter of the pointing device) in order to add left and right cursor keys as well as to make it easier for the user to use the same finger to navigate the display.

Unruh, as modified by Dow, Nakae and Mak, fails to teach a mouse button set, including a left button configured to operate as a first function button; and a right button configured to operate as a second function button. Examiner cites Fleck to teach a mouse button set (**Fig. 3, 310 and 312**), including a left button configured to operate as a first function button (**310 and Col. 6, lines 8-17**); and a right button configured to operate as a second function button (**312 and Col. 6, lines 8-17**). At the time the

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invention was made, it would have been obvious to a person of ordinary skill in the art to incorporate the use of a mouse button set as taught by Fleck in the information processing apparatus taught by Unruh, as modified by Dow, Nakae and Mak, in order to add functionality to the apparatus.

Unruh, as modified by Dow, Nakae, Mak and Fleck, fails to teach that the mouse button set also includes a center button configured to scroll a screen appearing on the display. Examiner cites Suzuki to teach a mouse button set (**Fig. 1, elements 5A, 5B and 5C**), including a center button configured to scroll a screen appearing on the display (**5C and Pg. 2, ¶ 41**). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to incorporate the use of a center button that is configured to scroll a screen appearing on the display as taught by Suzuki in the information processing apparatus taught by Unruh, as modified by Dow, Nakae, Mak and Fleck, in order to add functionality to the apparatus.

Unruh, as modified by Dow, Nakae, Mak and Suzuki, also fails to teach that the mouse button set is located near an opposite end from the common button and the cursor key in an axial direction of a hinge pin between the display and the keyboard. Examiner cites Fleck to teach an information processing apparatus to teach that a mouse button set (**Fig. 3, 310 and 312**) is located at an opposite end from a hot button (**“desktop” button—similar to a common button**) and cursor keys (**302, 304, 306 and 308**) in an axial direction of a hinge pin (**See Fig. 1**) between the display and the keyboard (**See Fig. 1**). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to arrange the mouse button opposite to a

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common button and cursor keys as taught by Fleck in the information processing apparatus taught by Unruh, as modified by Dow, Nakae, Mak and Suzuki, in order to add functionality to the apparatus when using the left hand to operate the display (**Col. 6, lines 8-17**).

***(Please note that although Unruh is described as a mobile phone it is not limited only to mobile phones. Other devices such as PDAs and computers may be used (Unruh—Pg. 4, lines 1-6). Therefore the combination of Unruh with Fleck is appropriate.)***

As to **Claim 5**, Unruh teaches at least one auxiliary input key (**Fig. 1, Reference Number 3, Key 2**) configured to input a first character when the predetermined program is not activated (**inputs the character “2”**) and to input a second character when the predetermined program is activated (**inputs the characters “a”, “b” or “c”**).

As to **Claim 7**, all of the claim limitations have been addressed with respect to Claim 1. (**See Claim 1 and note that the combination of Unruh, Dow, Nakae, Mak, Fleck and Suzuki, yields the structure of Claim 7**).

As to **Claim 12**, Unruh, as modified by Dow, Nakae, Mak and Suzuki in claim 1, fails to teach that the left button is configured to select a program or a menu that is pointed to with the pointer. The Examiner cites Fleck to teach a left button configured to select a program or a menu that is pointed to with the pointer (**Fig. 3,310 and Col. 6, lines 8-17**). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to provide a left button that is configured to select a program/menu that is pointed to with a pointer as taught by Fleck, in the information



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processing apparatus taught by Unruh, as modified by Dow, Nakae, Mak and Suzuki, in order to add functionality to the apparatus by allowing the user to select with the left hand (***Fleck—Col. 6, lines 8-17***).

As to **Claim 13**, Unruh, as modified by Dow, Nakae, Mak and Suzuki in claim 1, fails to teach that the display is configured to display a submenu including various items at a location of a cursor when the right button is selected. The Examiner cites Fleck to teach that the display is configured to display a submenu including various items at a location of a cursor when the right button is selected (***Fig. 3,312 and Col. 6, lines 8-17***). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to provide a right button that activates a submenu at the location of a cursor in a display as taught by Fleck in the information processing apparatus taught by Unruh, as modified by Dow, Nakae, Mak and Suzuki, in order to add functionality to the apparatus by allowing the user to activate submenu with the left hand (***Fleck—Col. 6, lines 8-17***).

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Unruh, Dow, Nakae, Mak, Fleck and Suzuki as applied to claims 1, 5, 7, 12 and 13 above, and further in view of Harada et al. (U.S. Patent 6,072,647—hereinafter “Harada”).

As to **Claim 4**, Unruh, teaches a confirmation key (***space character***) configured to confirm an item selected with the pointing device or one of the plurality of cursor keys (***Figs. 7-13 and Pg. 5, ¶ 63 and Pgs. 5-6, ¶’s 71-75—note that the space character***

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**is used as the confirmation button).** Unruh as modified by Dow, Nakae, Mak, Fleck and Suzuki, fails to teach a switch button configured to switch a direction of the display, wherein the switch button is adjacent to the cursor key. Examiner cites Harada to teach a switch button (**Fig. 9, Reference Number 65B**) configured to switch a direction of the display (**Col. 11, lines 19-30**). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to incorporate the use of a switch button as taught by Harada in the information processing apparatus taught by Unruh, Dow, Nakae and Mak in order to display an image in portrait or landscape (**Col. 13, lines 17-21**).

Unruh, as modified by Dow, Mak, Fleck, Suzuki and Harada, fails to teach that the common button, the switch button, and the confirmation key form a ring that surrounds the plurality of cursor keys and the pointing device. Examiner cites Nakae to teach a plurality of keys (**Fig. 1A, 14a, 14c, 14e, 14g and 14h**) forming a ring that surrounds a plurality of cursor keys (**14b**). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use the teachings of Nakae, that is, arranging keys to form a ring that surrounds a plurality of cursor keys, in the information processing apparatus taught by Unruh, as modified by Dow, Mak and Harada, in order to facilitate access to certain keys by providing limited movement between the cursor and the key of choice.

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5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Unruh, Dow, Nakae, Mak, Fleck and Suzuki as applied to claims 1, 5, 7, 12 and 13 above, and further in view of Davies (USPGPUB 2002/0028697--hereinafter "Davies").

As to **Claim 8**, Unruh teaches that in the second input mode, a single letter is selected by the at least one of the alphanumeric keys allocated to more than one character, and in response to the single letter selected by the at least one of the alphanumeric keys, the predetermined program generates a list including a single word and a group of words configured to be selected by the common button (***Unruh—Fig. 7 and Pg. 5, ¶ 71, note that the "6 mno" key is activated and in response the predetermined program generates a list including a single word "in" and a group of words, "go" and "im", configured to be selected by the common button***).

Unruh, as modified by Dow, Nakae and Mak, however, fails to teach that the common button is configured to select more than one word from the list at a time. Examiner cites Davies to teach a list of phrases that may be selected by the user (***Pg. 3, ¶ 35-39***). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to also include phrases as taught by Davies in the group of words provided on the information processing apparatus taught by Unruh, as modified by Dow, Nakae, Mak, Fleck and Suzuki in order to provide the user with more word options which would speed up the typing process.

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6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Unruh, Dow, Nakae, Mak, Fleck and Suzuki as applied to claims 1, 5, 7, 12 and 13 above, and further in view of Blumberg (U.S. Patent 6,799,303--hereinafter "Blumberg").

As to **Claim 9**, Unruh, as modified by Dow, Nakae and Mak, fails to teach that the alphanumeric keys include individual keys corresponding to each letter in the English alphabet in the first input mode. Examiner cites Blumberg to teach alphanumeric keys including individuals keys corresponding to each letter in the English alphabet in the first input mode (***See Fig. 31a and 31b***). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to incorporate the use of English alphabet letterings in the first input mode as taught by Blumberg in the information processing apparatus taught by Unruh, as modified by Dow, Nakae, Mak, Fleck and Suzuki, in order to add functionality by increase typing speed (***Blumberg—See Abstract***).

7. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Unruh, Dow, Nakae, Mak, Fleck and Suzuki as applied to claims 1, 5, 7, 12 and 13 above, and further in view of Ano (USPGPUB 2002/0030665—hereinafter "Ano").

As to **Claim 10**, Unruh, as modified by Dow, Nakae, Mak, Fleck and Suzuki, fails to teach that the left button and the right button included in the mouse button set are positioned to encircle the center button. Examiner cites Ano to teach a left button and a right button in a mouse button set that are positioned to encircle a center button (***Fig. 2a, elements 5-7***). At the time the invention was made, it would have been obvious to

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a person of ordinary skill in the art to provide the mouse button set configuration as taught by Ano in the information processing apparatus taught by Unruh, as modified by Dow, Nakae, Mak, Fleck and Suzuki, in order to allow for a compact mouse button set.

As to **Claim 11**, Unruh, as modified by Dow, Nakae, Mak, Suzuki and Ano, fails to teach that the left button is larger than the right button. Examiner cites Fleck to teach a left mouse button which is larger than a right mouse button (Fig. 3, 310 and 312). At the time the invention was made it would have been obvious to a person of ordinary skill in the art to use the teachings of Fleck, that is, providing a larger left button and a smaller right button, in the information processing apparatus taught by Unruh, as modified by Dow, Nakae, Mak, Suzuki and Ano, in order to allow the user to easily differentiate between the two buttons.

8. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Unruh, Dow, Nakae, Mak, Fleck and Suzuki as applied to claims 1, 5, 7, 12 and 13 above, and further in view of Yamada et al. (U.S. Patent 6,259,432—hereinafter “Yamada”).

As to **Claim 14**, Unruh, as modified by Dow, Nakae, Mak, Fleck and Suzuki, fails to teach that when the center button is pressed and held and force is then applied on the pointing device in a predetermined direction, the display screen is scrolled in the predetermined direction. Examiner cites Yamada to teach that when a center button is pressed and held and force is then applied on the pointing device in a predetermined direction, the display screen is scrolled in the predetermined direction (***Figs. 8 and 9 and Col. 1, line 6—Col. 4, line 51***). At the time the invention was made, it would have

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been obvious to a person of ordinary skill in the art to use the scrolling method taught by Yamada, that is pressing a center button and applying force to a pointing device, in the information processing apparatus taught by Unruh, as modified by Dow, Nakae, Mak, Fleck and Suzuki, in order to prevent the user from erroneously scrolling, being that Yamada's scrolling operation requires the activation of two elements (the center button and pointing device).

### ***Response to Arguments***

9. Applicant's arguments with respect to claims 1, 4, 5 and 7-14 have been considered but are moot in view of the new ground(s) of rejection.

10. Applicant's arguments filed April 21, 2009 have been fully considered but they are not persuasive. The Applicant argues the following: "Fleck describes positioning the mouse buttons (mouse assembly 112, left mouse button and right mouse button 312) on opposite sides of the first portion 102 of the computer. Thus, a user would have to use both hands to operate the mouse buttons of Fleck." (Pg. 8, first paragraph). The Examiner respectfully disagrees. Fleck teaches a mouse button set (310 and 312) arranged on the left side of the first portion of the computer (See Fig. 3). Fleck also teaches that the mouse button is used in conjunction with the pointer 300 (Co. 6, lines 8-17) as claimed in Claims 12 and 13. Furthermore, the instant specification does not teach that the information apparatus is to be use with a single hand, instead it teaches the use of two hands (Pg. 21, lines 5-18).

***Inquiries***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RODNEY AMADIZ whose telephone number is (571)272-7762. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sumati Lefkowitz/  
Supervisory Patent Examiner, Art Unit 2629

/R. A./  
Examiner, Art Unit 2629  
5/18/09